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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 09/954,765 | 09/18/2001 | Jeremy John Greenwood | LANDRO P148US | 8531 |

20210 7590 08/24/2004

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| EXAMINER |
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HOLLOWAY III, EDWIN C

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| ART UNIT | PAPER NUMBER |
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2635

DATE MAILED: 08/24/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/954,765

Applicant(s)

GREENWOOD ET AL.

Examiner

Edwin C. Holloway, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2,3,5, 6</u> . | 6) <input type="checkbox"/> Other: _____ |

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EXAMINER'S RESPONSE

1. In response to the application filed 9-18-01, the application has been examined. The examiner has considered the presentation of claims in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

Drawings

2. The examiner has noted that there is an extra line at the bottom of fig. 5 that passes through the "correct 1D?" box. If applicant would like to correct this informality, then a substitute sheet should be submitted. Otherwise, the figure will be published as originally submitted in any resulting patent. Correction is NOT required.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office

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action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Claim Rejections - 35 USC § 102 & 103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically

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disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 3, 5-6, 10, 12-16, 19-20 and 22-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Stippler (US 6218932).

Regarding claim 1, Stippler discloses a security system with security controller 2 and plurality of transmitters 3/3'/3'' associated with protected object 1. A portable transponder 5 receives a challenge signal from the transmitters and transmits a response signal. See col. 3 lines 9-27. The transponder measures vector information (reception power in three special coordinates) and varies its response depending the vector information by transmitting a vector quantity (individual components or relative magnitudes) corresponding to the vector information in col. 7 lines 1-25. The controller determines whether the vector information meets a predefined criteria and

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performs a security function only if the criteria is met (unlocking is only authorized if reception power levels X and Y are substantially different) in col. 5 lines 19-27.

Regarding claim 3, the vector quantity of Stippler includes a number of components and the vector information includes at least one component. See col. 7 line 20.

Regarding claim 5, the challenge of Stippler includes vector components from a plurality of transmitters. In col. 7 lines 1-25, the vector components (Xx, Xy, Xz) are from one antenna and components (Yx, Yy, Yz) from a different antenna. The vector information includes relative strengths (relative magnitude) in col. 7 lines 18-21.

Regarding claim 6, the transponder relays the vector information to the controller and the controller determines if the criteria is met in col. 5 lines 1-27 of Stippler.

Regarding claim 10, the transmitter in Stippler are arranged in groups, each group having at least two transmitters located substantially together in different orientation represented by the multiple drivers side transmitters 3' (front/back), multiple passenger side antennas 3'' (front/back) and multiple rear antennas 3 (tailgate /fuel tank flap/ fender).

Regarding claim 12, the relative strength of the challenge components vary with time in col. 7 lines 26-36 of Stippler.

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Also see col. 5 lines 58-65.

Regarding claim 13, the criteria include vector information varying in a way consistent the varying challenge in col. 6 lines 32-37 of Stippler.

Regarding claims 13-16, Stippler includes a transponder with three antennal coils at right angles or orthogonal to sense components of the challenge signal in three special coordinates in col. 7 lines 1-11.

Regarding claim 19, the protected article 1 of Stippler is a vehicle. See fig. 1 and col. 3 lines 9-15.

Regarding claim 20, the security features include allowing access to the vehicle (unlock doors) in col. 5 lines 23-25 and col. 7 lines 11-13.

Regarding claim 22, the security features include enabling the vehicle to start (starting an engine) in col. 5 lines 66-67 and col. 7 lines 12-15.

Regarding claim 23, the criteria comprise vector information consistent with the transponder located inside the vehicle in col. 6 lines 13-26.

7. Claims 2, 4, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stippler (US 6218932) as applied above in combination with Seal (US 6396438).

Seal discloses an analogous art access control system

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including a transponder with location feature. Regarding claim 2 and 4, the vector quantity includes Cartesian components (X, Y, Z) or magnitude and direction with the vector information including direction (positional angle) in col. 5 lines 30-60. Regarding claim 7, Seal includes comparison to criteria at the transponder in col. 3 lines 56-63. This allows operation at a dormant state for reduced power consumption in col. 6 lines 14-28. Regarding claim 11, the transmitter antennas of Seal are orthogonal corresponding to X, Y, Z axes in col. 9 lines 31-51. This allows more uniform field intensity.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the above features of Seal in the system of Stippler for the advantages discussed in Stippler such as reduced power consumption and more uniform field intensity.

8. Claims 7-9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stippler (US 6218932) as applied above in combination with Stobbe (US 6538560).

Stobbe discloses an analogous art vehicle security system that determines location of the transponder at a specific access point so that only that access point or closure is operated. See the abstract. The transponder may make examine the received information to make sure it meets a criteria in col. 7 lines 21-

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40. Regarding claims 7-9 and 21, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have includes in Stippler the features of Stobbe for increased security and convenience without delay.

9. Claims 8-9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stippler (US 6218932) as applied above in combination with Okada (US 6552649).

Okada discloses an analogous art vehicle security system that determines location of the transponder at a specific access point so that only that access point or closure is operated.

See the abstract, fig. 4, col. 1 and col. 7. Regarding claims 8-9 and 21, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have includes in Stippler the features of Okada for optimum timing (without delay) and suppressing battery consumption.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stippler (US 6218932) as applied above in combination with Doron (US 6239724).

Doron discloses an analogous art transponder with location function including sensors that may alternative be provided as a coil or hall effect devices in col. 10. Hall effect devices have the advantage of low power consumption in col. 13. It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to have substituted the hall effect sensor of Doron for the coil of Stippler because Doron teaches such a substitution in an analogous transponder with location function and Doron further suggest the combination by disclosing that Hall effect sensors provide the advantage of low power consumption.

11. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stippler (US 6218932) as applied above in combination with Treharne (US 5696485).

Treharne discloses transponder with a calibration signal transmitter. See the abstract and col. 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the transponder of Stippler the calibration transmitter of Treharne to properly calibrate the transponder for efficient communication.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walton (US 4654658) discloses a transponder ID system with vector phase angle detection. Boschini (US 5499022) and Muller (US 6208239) disclose vehicle security systems with plural zones corresponding to transponder position.

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CONTACT INFORMATION


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at ebc@uspto.gov. The Patent EBC is a complete customer service center that supports all Patent e-business products and service applications. Additional information is available on the Patent EBC Web site at <http://www.uspto.gov/ebc/index.html>.

Any inquiry of a general nature should be directed to the Technology Center 2600 receptionist at (703) 305-4700 or TC 2600 Customer Service at (703) 306-0377.

Facsimile submissions may be sent via fax number (703) 872-9306 to customer service for entry by technical support staff. Questions regarding fax submissions should be directed to customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (703) 305-4818. The examiner can normally be reached on M-F (8:30-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704.

EH
8/23/04


EDWIN C. HOLLOWAY, III
PRIMARY EXAMINER
ART UNIT 2635